

CLAIMS

1. A microconnector characterized by comprising:

a socket in which plural cantilever terminal blocks having pressure receiving parts are integrally formed on a board made of single crystal silicon, and socket leads are disposed on the terminal blocks; and

a plug in which plug leads corresponding to the socket leads are provided on a plug board.

10 2. A microconnector characterized by comprising:

a socket in which on a board made of single crystal silicon, plural cantilever terminal blocks having free ends with pressure receiving parts in their vicinities and fixed ends continuous with the board are integrally formed,

15 socket leads extending from the fixed ends to the free ends are disposed on upper surfaces of the terminal blocks,

a guide pin receiving part and a guide groove continuous with the guide pin receiving part and formed in parallel to the terminal blocks are formed, and

20 a housing covering the free ends and forming a receiving gap part C to receive a plug in cooperation with the board is mounted; and

the plug in which plug leads corresponding to the socket leads and a guide pin corresponding to the guide groove are provided on a plug board.

3. A microconnector according to claim 1 or 2, characterized

in that the free ends of the plural cantilever terminal blocks are directed to inside of the board.

4. A microconnector according to any one of claims 1 to 3,
5 characterized in that the terminal blocks in which fixed ends are continuous with the board at an insertion side of the plug and the terminal blocks in which fixed ends are continuous with the board at an opposite side thereto are provided, and the pressure receiving parts provided in the vicinities of the free ends are arranged in
10 a staggered manner.

5. A manufacturing method of a socket for a microconnector in which on a board made of single crystal silicon, plural cantilever terminal blocks including free ends having pressure receiving parts
15 in their vicinities and fixed ends continuous with the board are integrally formed, the manufacturing method of the socket for the microconnector comprising:

a step of applying a resist to one surface of the board;
a step of patterning the terminal blocks by photolithography;
20 a step of performing anisotropic etching to form the terminal blocks to predetermined heights while a bottom is made to remain;
a step of applying a resist to the other surface of the board;
a step of patterning the pressure receiving parts by photolithography; and
25 a step of performing isotropic etching to remove the bottom.

6. A manufacturing method of a socket for a microconnector

in which on a board made of single crystal silicon, plural cantilever terminal blocks including free ends having pressure receiving parts in their vicinities and fixed ends continuous with the board, and a guide pin receiving part and a guide groove continuous with the guide pin receiving part and formed in parallel to the terminal blocks are integrally formed, the manufacturing method of the socket for the microconnector comprising:

a step of applying a resist to one surface of the board;

a step of patterning the terminal blocks, the guide pin receiving part and the guide groove by photolithography;

a step of performing anisotropic etching to form the terminal blocks to predetermined heights while a bottom is made to remain and to form hollows of the guide pin receiving part and the guide groove;

a step of applying a resist to the other surface of the board;

a step of patterning the pressure receiving parts by photolithography; and

a step of performing isotropic etching to remove the bottom.